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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/554,269	06/29/2000	MANFRED BRAUNER	TPP-30873	2242

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EXAMINER	
EGAN, BRIAN P	

ART UNIT	PAPER NUMBER
1772	

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/554,269	Applicant(s) BRAUNER, MANFRED	
	Examiner Brian P. Egan	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15,17-22,24 and 25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15,17-22,24 and 25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The newly added limitation, "wherein the wall section is connected to the straight section of the frame," broadly encompasses embodiments that fail to convey to one skilled in the relevant art that the inventor had possession of the claimed invention at the time the application was filed. The aforementioned limitation encompasses embodiments comprising wall sections attached to the frame at any area along the straight section. In each of Figs. 2(a-d), however, the Applicant explicitly details embodiments comprising attachment sections at the gravity center line (depicted as #5 in the drawings) and the specification at page 3 states that the "wall section 3 is connected to the frame 2 at or very close to the gravity center line 5 of the frame 2." Therefore, the Applicant lacks support for embodiments in which the wall section is attached along the straight section of the frame outside of the gravity center line. The Examiner therefore suggests incorporating the limitations of claim 3 into claim 1 such that the wall section is connected to the straight section of the frame about the gravity center line of the frame. The Examiner further notes that the terms "about" and "very close to" are relative terms and the Examiner requests that

the Applicant explicitly define the scope of the aforementioned terms. Proper clarification and/or correction are required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-15, 17-22, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brauner (WO 97/39954) in view of Rehrig (#3,565,278), Umiker (#5,395,010), and Boucher-Giles (WO 97/16353).

Brauner teaches a flat or semi-flat element to be used in a collapsible container (See Abstract and Figs. 1-5) including a partly or completely circumambient frame (Page 2, lines 2-5) and an intermediate wall section (Fig. 1, #1), which element is manufactured through molding of a polymeric material (Page 1, lines 27-28), whereby the frame is used as a carrying structure (Page 2, lines 19-21). The frame contains a closed hollow profile (Page 2, lines 2-5) and the frame is connected to the wall at its corner (Figs. 3-4, #7 (Frame) connected to #1 (Wall Section)), thereby being attached at a symmetrical point whereby a gravity center line runs through the connection point and the opposite corner. Although the frame is connected to the wall at its corner, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have rearranged the connection point such that it is connected along a straight wall portion of the frame since, absent unexpected results, it has been

held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. The closed hollow profile of the frame is formed by injection molding (Page 1, lines 27-28). The thermoplastic material is allowed to solidify closest to the inner wall of the mold so that a barrier is formed before injecting a pressurized fluid to create the hollow profile (Page 2, lines 2-14).

Brauner fails to teach the use of a resilient section to combat temperature related shrinkage of the injection molded parts. Brauner also fails to teach U-shaped and ribbed frame embodiments, and also fails to teach the wall section being thinner at the side closest to the frame section than the average thickness of the wall section.

Rehrig teaches the use of a resilient section ("corrugations") in injection-molded containers (see Abstract). Rehrig teaches the use of the resilient section for the purpose of providing a flexible, slightly resilient, springlike section to accommodate longitudinal expansion and shrinkage in the panel, as well as limited lateral deflection of the panel – thereby increasing the life of the crate (Col. 2, lines 6-18).

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have modified Brauner to include a resilient section between parts exhibiting differential temperature related shrinkage, i.e., between the frame and wall section, as taught by Rehrig in order to provide a flexible, slightly resilient, springlike section to accommodate longitudinal expansion and shrinkage in the panel, as well as limited lateral deflection of the panel – thereby increasing the life of the crate.

Umiker teaches that it is notoriously well known to provide frame structures of plastic containers with multiple embodiments, including the conventional embodiments which include

U-shaped and ribbed profiles (see Fig. 2), as well as embodiments slightly more structurally sound which include closed hollow profiles (see Fig. 3). Although Umiker fails to teach a rib structure wherein the ribs are spaced at a distance from each other smaller than the height of each of the plurality of ribs, it would have been an obvious matter of design choice to change the size of each rib and distance between each rib, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). Umiker teaches the notoriously well known embodiments for the purpose of demonstrating the multiple forms of handle portions that are available for plastic container structures.

Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have modified Brauner by interchanging the frame structure with U-shaped, ribbed, and hollow profiles as taught by Umiker in order to create a desirable handle portion for the end product.

Boucher-Giles teaches a plastic-molded collapsible container whereby the wall sections are reduced in thickness by tapering the wall towards the base creating a pivot line. Boucher-Giles teaches the reduced-thickness wall sections for the purpose of allowing proper folding of the collapsible container (Page 4, lines 9-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have modified Brauner to include a tapered wall portion such that the wall thickness on the side of the wall section is thinner than the average thickness of the wall portion as taught by Boucher-Giles in order to allow proper folding of the collapsible container. Further note that such a modification would create a wall section whose thickness is

disparate to the thickness of the circumambient frame in accordance with Applicant's newly added claim 24.

5. Claims 1-15, 17-22, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brauner (WO 97/39954) in view of Biglin (#3,634,182), Umiker (#5,395,010), and Boucher-Giles (WO 97/16353).

Brauner teaches a flat or semi-flat element to be used in a collapsible container (See Abstract and Figs. 1-5) including a partly or completely circumambient frame (Page 2, lines 2-5) and an intermediate wall section (Fig. 1, #1), which element is manufactured through molding of a polymeric material (Page 1, lines 27-28), whereby the frame is used as a carrying structure (Page 2, lines 19-21). The frame contains a closed hollow profile (Page 2, lines 2-5) and the frame is connected to the wall at its corner (Figs. 3-4, #7 (Frame) connected to #1 (Wall Section)), thereby being attached at a symmetrical point whereby a gravity center line runs through the connection point and the opposite corner. The closed hollow profile of the frame is formed by injection molding (Page 1, lines 27-28). The thermoplastic material is allowed to solidify closest to the inner wall of the mold so that a barrier is formed before injecting a pressurized fluid to create the hollow profile (Page 2, lines 2-14).

Brauner fails to teach the use of a resilient section to combat temperature related shrinkage of the injection molded parts. Brauner also fails to teach U-shaped and ribbed frame embodiments, and also fails to teach the wall section being thinner at the side closest to the frame section than the average thickness of the wall section.

Biglin, however, teach an injection molded container comprising a resilient section between the circumambient frame and the wall section wherein the resilient section is part of the

wall section (Fig. 9, #53). The resilient section is formed by using an annular lip (Fig. 6, #16) such that the annular lip retains thermoplastic material in the circumambient frame section ("rim cavity") from that in the remainder of the mold cavity (Col. 2, lines 34-39). The wall section is connected to a straight section of the frame (see Fig. 9). Biglin teach the use of a resilient section for the purpose of preventing shrinkage of the frame away from the wall section (see Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have modified Owsen to include a resilient section as taught by Biglin in order to prevent shrinkage of the frame away from the wall section. It further would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have modified Owsen by connecting the wall section to a straight section of the frame as taught by Biglin since such a connection point prevents shrinkage of the frame away from the all section and since such a modification involves a mere rearrangement of parts -- rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Umiker teaches that it is notoriously well known to provide frame structures of plastic containers with multiple embodiments, including the conventional embodiments which include U-shaped and ribbed profiles (see Fig. 2), as well as embodiments slightly more structurally sound which include closed hollow profiles (see Fig. 3). Although Umiker fails to teach a rib structure wherein the ribs are spaced at a distance from each other smaller than the height of each of the plurality of ribs, it would have been an obvious matter of design choice to change the size of each rib and distance between each rib, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as

being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). Umiker teaches the notoriously well known embodiments for the purpose of demonstrating the multiple forms of handle portions that are available for plastic container structures.

Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have modified Brauner by interchanging the frame structure with U-shaped, ribbed, and hollow profiles as taught by Umiker in order to create a desirable handle portion for the end product.

Boucher-Giles teaches a plastic-molded collapsible container whereby the wall sections are reduced in thickness by tapering the wall towards the base creating a pivot line. Boucher-Giles teaches the reduced-thickness wall sections for the purpose of allowing proper folding of the collapsible container (Page 4, lines 9-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have modified Brauner to include a tapered wall portion such that the wall thickness on the side of the wall section is thinner than the average thickness of the wall portion as taught by Boucher-Giles in order to allow proper folding of the collapsible container. Further note that such a modification would create a wall section whose thickness is disparate to the thickness of the circumambient frame in accordance with Applicant's newly added claim 24.

Response to Arguments

6. Applicant's arguments filed 12/16/03 have been fully considered but they are not persuasive.

The Applicant's primary contention is that the prior art of record fails to teach a wall section connected to a straight edge portion of the frame section. Applicant's argument is all conjecture, however, and there is no demonstration of any unexpected results with such an orientation. The Examiner suggests that the Applicant submit a declaration with proof of unexpected results with regards to the positioning of the wall section along the straight edge portion of the frame section. Otherwise, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have rearranged the positioning of the connection point. The Examiner further directs the Applicant's attention to the new grounds of rejection above involving the teachings of Biglin ('182). Biglin teaches the use of the resilient section attached along an edge portion of a frame section. Therefore, Biglin provides motivation, even upon demonstration of unexpected results by the Applicant, of positioning the wall section to be in contact with the frame section at an area along the straight edge of the frame and thus, it would have been obvious to one of ordinary skill in the art to modify WO '954 by rearranging the connection point of the wall and frame sections.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Egan whose telephone number is 571-272-1491. The examiner can normally be reached on M-F, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BPE 2/22/04

/Harold Pyon/
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SUPERVISORY PATENT EXAMINER
1772

2/26/04